

REMARKS

Reconsideration of the rejections of the Office Action and consideration of new claims 34 and is respectfully requested. Claims 1 - 35 are pending in the application.

Drawings

The Office Action stated that the drawings do not show the 1/4 inch tube 84 that extends to the cab suspension or the 3/8 inch tube extending to the air horn as described in the specification. Attached are replacement drawing sheets that add reference character 84 to the line labeled "TO CAB SUSPENSION" and reference character 86 to the line labeled "TO AIR HORN" on Figure 12 as described on page 6, lines 4-18.

Allowable Subject Matter

As amended, claims 7 and 9 are in independent form including all of the limitations of originally filed claims 1 and 8 respectively.

Claim Rejections

Claims 1-5, 8-21, and 27-33 were rejected as being anticipated or unpatentable over U.S. patent number 4,058,349 to Ury or U.S. patent number 6,036,283 to Su. Claims 6, 8, and 22-26 were rejected as being unpatentable over Su or Ury in view of the Norgren pneumatics manual submitted by Applicant.

Claims 1-6

As amended, claim 1 features a one piece pressure protection valve and manifold. The one piece pressure protection valve and manifold includes a valve disposed in a housing. The housing defines an inlet passage, a valve cylinder, and a plurality of outlet passages. The valve cylinder is interposed between the inlet passage and a passage to the outlet passages. The valve is constructed to prevent fluid flow from the inlet passage to the outlet passages when a fluid pressure at the inlet passage is below a predetermined value.

The pressure protection valve and manifold of amended claim 1 is not anticipated by the Su or Ury patents and is not obvious in view of Su or Ury, because claim 1 includes elements that are not shown or suggested by the Su patent or the Ury patent. One feature of claim 1 that is not shown or suggested by the Su patent or the Ury patent is a passage between the valve cylinder and the outlet passages. The Ury and Su patents disclose outlet passages that terminate directly in the valve cylinder, rather than a separate passage that extends to the valve cylinder. The one piece pressure protection valve and manifold having a passage that extends from the valve

cylinder to the outlet passages of claim 1 is not shown or suggested by the Ury patent or the Su patent. Claim 1 is in condition for allowance.

Claims 2-6 depend from claim 1 and are also in condition for allowance.

The Office Action indicated that claim 7 is allowable.

Claim 8

Claim 8 features a one piece pressure protection valve and manifold. The pressure protection valve and manifold includes a housing that defines an inlet passage, a valve cylinder, a plurality of outlet passages, and a vent. The valve cylinder is between the inlet passage and a passage to the outlet passages. A valve piston is biased toward the inlet by a spring. The vent prevents a build up of pressure between the piston and an interior of the housing. The valve closes on decreasing pressure between about 62 and 72 PSIG and opens on rising inlet pressure between 75 and 95 PSIG. Push to connect cartridge fittings facilitate attachment to the inlet and to the outlets.

The pressure protection valve and manifold of claim 8 is not anticipated by the Su or Ury patents and is not obvious in view of Su or Ury in view of the Norgren pneumatics manual. Claim 8 includes elements that are not shown or suggested by the Su patent, the Ury patent or the Norgren pneumatics manual. One feature of claim 8 that is not shown or suggested by the Su patent, the Ury patent or the Norgren manual is a passage between the valve cylinder and the outlet passages. Since claim 8 includes features that are not shown or suggested by the Ury patent, the Su patent, or the Norgren manual, claim 8 is not anticipated or obvious in view of these references. Claim 8 is in condition for allowance.

Claims 10-23

Claim 10 features a system for preventing air pressure loss to vehicle air brakes. The system includes an air tank, a one piece pressure protection valve and manifold, an air powered accessories, and air tubes that connect the one piece pressure protection valve and manifold to the air tank and the air powered vehicle accessories. The one piece pressure protection valve and manifold includes a housing that defines an inlet passage, outlet passages, and a valve in the housing between the inlet passage the outlet passages. The valve is constructed to prevent fluid flow from the inlet passage to the outlet passages when a fluid pressure at the inlet passage falls below a predetermined value. The system of claim 10 prevents air pressure loss to the air brakes if an air powered vehicle accessory leaks, since fluid flow from the inlet passages to outlet passages is prevented when the pressure at the inlet drops due to the air powered vehicle accessory leak.

Applicant respectfully submits that claim 10 is not anticipated by the Ury patent or the Su patent as asserted in the Office Action. In order for a claim to be anticipated, each and every

feature of the claim must be shown by the reference itself. The Office Action asserts that the outlet passages of Ury and Su are "capable of being attached to a vehicle accessory." However, to anticipate claim 10 it is not sufficient that the devices of Ury and Su may be capable of being attached to a vehicle accessory. To meet this limitation of claim 10, Ury or Su would have to "actually" disclose the outlet passages attached to a vehicle accessory. The devices of Ury and Su are used in the brake system itself, not with air powered accessories. Claim 10 is not anticipated by Ury or Su.

Further, the Ury and Su patents do not disclose or suggest a system that prevents air pressure loss to brakes by preventing fluid flow from the inlet passage to the outlet passages when the pressure at the inlet passage falls below a predetermined value. The device disclosed by Su distributes braking pressure first to the front wheels and then to the front and rear wheels evenly. The Su device allows fluid flow from the inlet passage to at least one outlet passage at all times. Su does not disclose or suggest a device that prevents fluid flow when the pressure is below a predetermined value and does not in any way prevent air pressure loss to brakes. The system disclosed by Ury does not prevent air pressure loss to the brakes. To the contrary, the valve disclosed by Ury exhausts to stop the vehicle in the event of a leak. Claim 10 includes features that are not shown or suggested by the Ury patent and the Su patent and is therefore in condition for allowance.

Claims 11-18 depend from claim 10 and further recite various specific air powered accessories. These claims are rejected as anticipated by the Ury and Su patents. Applicant respectfully points out that the Office Action does not assert that Ury or Su actually disclose the elements recited by claims 11-18 as would be required to anticipate claims 11-18. Rather, the Office Action states that "the outlets of Ury (Su) are capable of being attached to any pneumatic device on a vehicle." Claims 11-18 are not anticipated by Ury or Su and are in condition for allowance.

Claims 19-23 also depend from claim 10 and are in condition for allowance.

Claims 24-26

Claim 24 features a system for preventing air pressure loss to vehicle air brakes. The system includes an air tank, a one piece pressure protection valve and manifold, an air powered accessory, and air tubes that connect the one piece pressure protection valve and manifold to the air tank and the air powered vehicle accessory. The pressure protection valve and manifold includes a housing that defines an inlet passage, a valve cylinder, a plurality of outlet passages, and a vent. The valve cylinder is between the inlet passage and a passage to the outlet passages. A valve piston is biased toward the inlet by a spring. The vent prevents a build up of pressure between the piston and an interior of the housing. The valve closes on decreasing pressure

between about 62 and 72 PSIG and opens on rising inlet pressure between 75 and 95 PSIG. Push to connect cartridge fittings facilitate attachment to the inlet and to the outlets. The system of claim 24 prevents air pressure loss to the air brakes if the air powered vehicle accessory leaks, since fluid flow from the inlet passages to outlet passages is prevented when the pressure at the inlet drops to between 62 and 72 PSIG due to the air powered vehicle accessory leak.

Claim 24 includes features that are not shown or suggested by the Ury patent, the Su patent or the Norgren manual. For example, the Ury and Su patents and the Norgren manual do not disclose or suggest a system that prevents air pressure loss to brakes by preventing fluid flow from the inlet passage to the outlet passages when the pressure at the inlet passage falls below a predetermined value. Claim 24 is in condition for allowance.

Claims 25 and 26 depend from claim 24 and are also in condition for allowance.

Claims 27-33

Claim 27 features a method of preventing air pressure loss to air brakes. In the method, an inlet of a one piece pressure protection valve and manifold is connected to a source of fluid pressure. Outlets of the one piece pressure protection valve and manifold are connected to air driven accessories. A passage between the inlet and the outlets is opened when pressure applied to a valve of the one piece pressure protection valve is greater than a first predetermined value. The passage between the inlet and the outlets is closed when the fluid pressure is less than a second predetermined value to prevent air pressure loss to air brakes.

The Ury and Su patents do not disclose or suggest the method of claim 27. The Ury and Su patents do not disclose or suggest preventing air pressure loss to air brakes by closing a passage between the inlet and the outlets when the fluid pressure is less than a predetermined value. The valve disclosed by the Ury patent exhausts the air pressure to the brakes when the inlet port 36 is closed (the exhaust opens in this condition). See Ury column 5, lines 3-22. Thus, the Ury patent discloses exhausting the air pressure, rather than preventing air pressure loss to the brakes. The Su patent does not relate to preventing air pressure loss to air brakes. All positions of the piston of the Su valve allow fluid flow from the input to one or more outlets. As such, the device disclosed by Su could not possibly close a passage between the inlet and the outlets when the fluid pressure to prevent air pressure loss to air brakes. Claim 27 is in condition for allowance.

Claims 28-33 depend from claim 27 and are also in condition for allowance.

New claims 34 and 35

Applicant respectfully requests consideration of new claims 34 and 35.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future

replies, to charge payment or credit any overpayment to Deposit Account No. 23-0630 for any additional fees required under 37 C.F.R. § 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

Date: July 7, 2003

Ken Smith
Kenneth J. Smith
Reg. No. 45,115

Telephone: (216) 241-6700
Facsimile: (216) 241-8151

Attachments: Set of Replacement Drawings